

Commonwealth of Kentucky
Division for Air Quality
RESPONSE TO COMMENTS

ON THE TITLE V RENEWAL DRAFT PERMIT NO. V-06-014

KENTUCKY UTILITIES COMPANY
GREEN RIVER GENERATING STATION

CENTRAL CITY, KY 42330

JUNE 21, 2007

BEN MARKIN, REVIEWER

SOURCE I.D.#:	21-177-00001
SOURCE A.I. #:	3228
ACTIVITY #:	APE20040002

SOURCE DESCRIPTION:

A Title V Operating Permit renewal application was received for the Kentucky Utilities Company/Green River Generating Station on September 17, 2004. The applicant proposes to continue to operate an electric power generation plant in Central City, Kentucky. The station consists of two (2) coal-fired boilers, supplying steam to two (2) dedicated turbine-generators. The boilers are pulverized coal-fired (number two fuel oil for startup and stabilization), dry bottom, wall-fired type boilers. The renewed Title V Operating Permit will include the Phase II Acid Rain Permit and the NOx Budget Permit for this source.

PUBLIC AND U.S. EPA REVIEW:

On July 5, 2006, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Central City Leader* in Central City, Kentucky. The public comment period expired 30 days from the date of publication.

Comments were received from Louisville Gas and Electric, as the owner to the Kentucky Utilities Company/Green River Generating Station on August 4, 2006. Attachment A to this document lists the comments received and the Division's response to each comment. Minor changes were made to the permit as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Please see Attachment A for a detailed explanation of the changes made to the permit. The U.S. EPA has 45 days to comment on this proposed permit.

ATTACHMENT A

Response to Comments

Comments on Kentucky Utilities Company (KU), Green River Generating Station Draft Title V Air Quality Permit submitted by Marlene Zeckner Pardee, Senior Environmental Scientist.

Permit Application Summary Form

1. It appears that the actual emissions noted on the table are from 2004. Please add a footnote which identifies the year this data was based upon.

Division's response: The Division concurs with the comment and has added a footnote to the table indicating that this data is based upon calendar year 2004.

2. Source Process Description – KU suggests, for clarity, changing the first sentence in the third paragraph to: “The ash handling system removes the bottom ash and fly ash residuals from the combustion of coal”. The fly ash system takes care of the fly ash. The bottom ash system takes care of the bottom ash. They then combine and are sent to the ash pond.

Division's response: Comment acknowledged, change made.

Permit Statement of Basis

- 3 Page 1/Source Description – KU suggests, for clarity, changing the first sentence in the forth paragraph to: “The ash handling system removes the bottom ash and fly ash residuals from the combustion of coal”. The fly ash system takes care of the fly ash. The bottom ash system takes care of the bottom ash. They then combine and are sent to the ash pond.

Division's response: Comment acknowledged, change made.

4. Page 2/Comments/(1)(a) – Typo in the heading. It should read as “Emission Unit 03 (EP02) Coal-fired Boiler #4, Utilizing No. 2 Fuel Oil for Start-up and Stabilization – **Unit #3**” not Unit #1.

Division's response: Comment acknowledged, change made.

5. Page 2/Comments/(1)(a) – Typo in the third sentence. The input rating of 976 “MmBtu/hr” should be “mmBtu/hr”.

Division's response: Comment acknowledged, change made.

6. Page 2/Comment/(1)(b) – Typo in the heading. It should read as “Emission Unit 04 (EP03) Coal-fired Boiler #5, Utilizing No. 2 Fuel Oil for Start-up and Stabilization – **Unit #4**” not Unit #1. The net electrical output of Unit 4 is 105 megawatts, not 97 megawatts.

Division's response: Comment acknowledged, change made.

7. Page 3/Comments/(4)(c) – Typo in the third sentence. The PM limit of “0.14 lb/MmBtu” should be “0.14 lb/mmBtu”.

Division’s response: Comment acknowledged, change made.

8. Page 3/Comments/(4)(c) – Typo in the sixth sentence. The PM limit of “0.29 lb/MmBtu” should be “0.29 lb/mmBtu”.

Division’s response: Comment acknowledged, change made.

9. Page 4/Comments/(4)(c)(2)– KU requests that the verbiage “good engineering practices” be added. The operational requirements are not limited to the boiler. KU must also consider the operating conditions of the pollution control equipment (low NOx burners, ESP). The suggested language follows:

...recommended by the manufacturer ***or determined by good engineering practices*** and the time does not exceed the manufacturer’s recommendations ***or good engineering practices***.

Division’s response: The applicable regulation 40 KAR 61:015, Section 4(c) states:

*“For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is **that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.**”*

*Although the Permit and Statement of Basis (SOB) do not explicitly state that good engineering practices are required in relation to 401 KAR 61:015, Section 4(c), the requirements under **7. Specific Control Equipment Operating Conditions** and **Section E** of the permit require the ESP and Low NOx burners for the boiler to be maintained in accordance with the manufacturer’s specifications and/or good operating practices.*

There have been no changes to the Permit or SOB as a result of this comment.

10. Page 4/Comments/(4)(c) & (4)(d)– Typo- There are two 4(c’s), one is on page 3 and one is on page 4. 4(c) should be 4(d) and the existing 4(d) should be 4(e).

Division’s response: Comment acknowledged, change made.

11. Page 6/Monitoring and Testing (2)– KU requests that the verbiage (noted in bold/italics) be added, in the interim, if KU is unable to establish the opacity trigger level during the testing period. The suggested language follows:

...within one year following the issuance of this permit ***to attempt to*** establish the correlation between opacity and particulate ***matter*** emissions for boilers 4 and 5. ***If a correlation can not be established, the permitted opacity limitation shall become the trigger level until the correlation is established. The permittee will attempt to establish a correlation within the next 6-month period.***

Division's response: The Division will decide, at the time the testing protocol is submitted, if the testing methodology is appropriate for establishing a correlation between opacity and particulate matter for boilers 4 and 5. Simply using the regulatory opacity limitation as a trigger level will not ensure compliance with 40 CFR Part 64 for emissions of particulate matter. Since the permittee must comply with 40 CFR Part 64 upon permit renewal, and since the original Title V permit No. V-97-045 required a test to establish the correlation between opacity and particulate matter for this emission unit (i.e., Sections B for Boilers 4 and 5, Condition 3.a), the Division believes the current test requirement to be appropriate. No changes have been made to the permit as a result of this comment.

12. Page 7/Past Permit Summary- The heading "Past Permit Summary" is a bit confusing, as it appears to include the current permit. KU suggests changing it to "Permit Summary" or removing the current permit information in the attached table. Also, although the permit will have an expiration date in 2011, Section J provides allowance allocation information only through 2010. Providing allocation information to include 2011 may clarify that the Title V Permit, the Acid Rain Permit, and the NO_x Budget Permit all have the same expiration date. Alternately, the table of SO₂ allocations in Section J could be deleted as this information isn't directly relevant to permit limitations, requirements or compliance determinations.

Division's response: The Division concurs with the comment and has revised the heading "Past Permit Summary" on page 7 of the SOB to "Permit Summary". Also, to be consistent with the expiration date of the Title V Operating Permit, Section J of the permit has been revised as requested to include SO₂ allowances for Boilers #4 and #5 until 2011.

Title V Permit

13. Page 2, Unit 03/Description/3rd line – The description "and low nitrogen oxide (NO_x) burner" needs an "s" added to burner (burners).

Division's response: The Division concurs with the comment and has revised the permit as suggested by the source.

14. Page 2, Unit 03/Description/6th line – Delete "the ESP was installed in 1973 and the Low NO_x burner was installed in 2001." The ESP and Low NO_x burners are noted in the description, lines 2 and 3. Unlike the construction/operational dates of the boiler, the installation dates of the Low NO_x burners are not needed to denote the date a regulation is or is not applicable. (Note: the Low NO_x burners were installed in 2002, rather than 2001)

Division's response: The date of installation of the Low NOx burners was changed from 2001 to 2002. The installation dates of the Low NOx burners and the ESP were not removed from the emission unit description because 401 KAR 61:015, Section 4(4) has applicable requirements for indirect heat exchangers when its control device has been replaced. Therefore the installation date of the ESP is necessary to determine applicability of 401 KAR 61:015, Section 4(4). The installation date of the Low NOx burners is for informational purposes.

15. Page 2, Unit 03/Applicable Regulations – Regulation 401 KAR 61:015 is applicable to units with a capacity of “250 mmBtu per hour” not “250 Btu per hour”.

Division's response: The Division concurs and has revised the permit as requested.

16. Page 2, Unit 03/Applicable Regulations – Cite the regulation as “40 CFR **Part** 64”.

Division's response: The Division concurs and has revised the permit as requested.

17. Page 2, Unit 03/Emission Limitations 2b – KU requests the removal of “with respect to particulate matter”. Particulate matter is based on a three hour average, and is addressed in 2a. Opacity is based on a 6-minute average and addressed in 2b. The verbiage “shall not exceed 20 percent opacity based on a six minute average” does not need to be repeated in 2bii, it is already stated in 2b. In addition, KU requests that the verbiage “good engineering practices” be added to b(ii). The operational requirements are not limited to the boiler. KU must also consider the operating conditions of the pollution control equipment (low NOx burners, ESP). The suggested language for 2bii follows:

“Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer **or determined by good engineering practices** and the time does not exceed the manufacturer’s recommendations **or good engineering practices.**”

Division's response: The Division does not agree with the request to remove the verbiage “with respect to particulate matter” from this permit condition. The language of the condition is consistent with the underlying cited rule. The Division has revised the permit and removed the verbiage “shall not exceed 20 percent opacity based on a six minute average” from Emission Limitations 2b as this language was redundant.

In regards to the source's request to add the phrase “or good engineering practices” to condition 2(b)(ii), there have been no changes made to the permit as a result of this comment. See response to comment 9.

18. Page 3, Unit 04/Testing Requirements 3a – KU requests that verbiage be added, in the interim, if KU is unable to establish during the testing period. The suggested language follows:

“...to the Permittee shall ***attempt*** to establish the correlation between opacity and particulate matter emissions by stack testing. ***If a correlation can not be established, the permitted opacity limitations shall become the trigger level until the correlation is established. The permittee will attempt to establish a correlation with the next 6-month period.*** This testing shall be conducted...”

Division’s response: See response to comment 11. No changes have been made to the permit as a result of this comment.

19. Page 4, Unit 03/Specific Monitoring Requirements 4(b)(i)- Suggest “if any 3-hour average opacity value” instead of “if any six-minute average opacity (averaged over a period of three hours) value”. The PM emission limit is 0.29 lb/mmBtu based on a 3-hour average, not “each 6 minute average” (if any six-minute average).

Division’s response: The Division acknowledges the comment and has revised the permitted language to read “ If any three (3) hour average opacity value exceeds the indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any repairs “

20. Page 4, Unit 03/Specific Monitoring Requirements 4(b)(ii)- Suggest “data averaged over a 3-hour period” instead of “data averaged over six-minute periods”. The PM emission limit is 0.29 lb/mmBtu based on a 3-hour average, not “6 minute periods”. KU is also requesting that the verbiage “shall perform a stack test in the following quarter...before conducting the test” be changed to “shall submit in the following calendar quarter a compliance test protocol as required by Section G(a)17 of this permit. Testing shall be conducted as per the submitted protocol to demonstrate compliance with the particulate standard while operating at representative conditions”.

401 KAR 50:045, Section 2, requires a source to submit a test protocol 60 days prior to the scheduled test date. If KU is required to complete the testing in the next calendar quarter, KU must, as an example for a first quarter exceedance, submit the test protocol by April 30 and complete the test on June 29 or 30. This does not allow much flexibility. This only gives KU 30 days to review the quarterly data, prepare the test protocol, submit the protocol, and two (2) days at the end of the quarter to complete the testing. If the state has any issues with the test protocol such that a re-submittal is necessary, the testing may not be able to be completed in the “following” quarter.

Division's response: : Division acknowledges the comment and has revised the permit to read: " If five (5) percent or greater of the COM data (three (3) hour average of opacity values) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (a)(17) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests."

21. Page 4, Unit 03/Specific Monitoring Requirements 4(c)- Suggest the addition of the following sentence at the end of the paragraph. "Pursuant to 40 CFR 64.3(d) the CEM shall be used to satisfy CAM requirements".

Division's response: As discussed in the Statement of Basis prepared in support of this Title V permit, the boilers are subject to the requirements of 40 CFR Part 64 for emissions of particulate matter. The condition referenced by the commenter is not related to particulate matter emissions monitoring. Therefore, no changes have been made to the permit due to this comment.

22. Page 5, Unit 03/Specific Monitoring Requirements 4(g)- KU questions the requirement to monitor the time between ignition and the time steady state operation is achieved be removed. The cited regulations, 401 KAR 61:005 and 401 KAR 61:015, do not contain a requirement to monitor the time between ignition and the time of achieving steady state operation. 401 KAR 50:055 requires notification of start-up (and shut-down and malfunction) events if the emissions are or may be in excess of the standard. It does not require the monitoring/recordkeeping/reporting of every start-up (i.e. "the time between ignition and the time of steady state operation"). KU does not currently have equipment which can record this type of data at the Green River Station and estimates it would take six (6) months to install program hardware and software for this task. If it is found that this monitoring is required by regulation, KU requests permit language to allow an effective date of six (6) months after the permit is used, so that equipment can be installed at Green River Station to monitor the data.

Division's response: The underlying opacity limitation and requirement of 401 KAR 61:015, Section 4(3)(c) is not a new requirement applicable to this source. The Division has continually strived to improve its permit to meet the regulatory requirements and to place the least amount of burden upon industry. After meeting with various parties, the Division has changed its monitoring language to the simple "The permittee shall monitor the duration of the start-up" and "The permittee shall record the duration of the start-up". The Division feels that this grants appropriate flexibility for the source while meeting the conditions of various regulations. For example, 401 KAR 50:055 exempts the source from being in compliance with opacity standards during start-up. The Division has a compelling interest in knowing the duration of the time when the source is being exempted from a standard.

23. Page 5, Unit 03/Specific Record Keeping Requirements 5(c) - KU requests that this

recordkeeping requirement be deleted from the permit. KU has submitted the opacity indicator levels as the CAM plan for this unit. This language appears to be establishing another CAM requirement that was not specified in the Green River CAM plan.

Division's response: The Division has been given authority by the U.S. E.P.A. under the approved Kentucky State Implementation Plan (SIP) to add conditions to an air permit to ensure compliance with any air regulation applicable to a source/facility. This requirement has been added to the permit to ensure that the ESP is operating properly and therefore adequately controlling particulate emissions from the boiler. Proper operation of this unit helps to ensure compliance with 401 KAR 61:015, Section 4 and 40 CFR Part 64. This permit condition is consistent with record keeping requirements required for other similar sources, and there have been no changes to the permit due to this comment.

24. Page 5, Unit 03/Specific Record Keeping Requirements 5(d) - KU requests the addition of "or electronic format" after "in a designated logbook". This information is stored electronically.

Division's response: The Division has revised the permit as requested by the source.

25. Page 5, Unit 03/Specific Record Keeping Requirements 5(e) – KU questions the requirement to record the time of ignition; the time steady state operation is achieved, and calculate and record the elapsed time between the two. Similar to comment #22, 401 KAR 61:005 and 401 KAR 61:015 do not contain a requirement to record this data. 401 KAR 50:055 requires notification of start-up (and shutdown and malfunction) events if the emissions are or may be in excess of the standard. It does not require the monitoring/recordkeeping/reporting of every start-up. KU does not currently have equipment which can record this type of data at the Green River Station and estimates that it would take six (6) months to install and program the hardware and software for this task. If it is found that this recordkeeping is required by regulation, KU requests permit language to allow an effective date of six (6) months after the permit is issued, so that equipment can be installed at Green River Station to record the data.

Division's response: See response to comment 22.

26. Page 6, Unit 03/Specific Record Keeping Requirements 6(a)(i) - KU suggests, for clarity, changing the second sentence to "The averaging period used for data reporting should correspond to the emission standard averaging period which is a twenty-four (24) hour averaging period **for sulfur dioxide**." Twenty-four hour averaging applies to sulfur dioxide not opacity.

*Division's response: The Division believe the commenter meant '**Reporting Requirement** instead of '**Record Keeping**' and has revised Section 6(a)(i) of the permit.*

27. Page 6, Unit 03/Specific Record Keeping Requirements 6a(iv) - KU requests the addition of “(passed calibrations)” after “proof of continuous monitoring system performance” to clearly identify that passed calibrations equal the proof that is required by 6(iv).

Division’s response: The Division believe the commenter meant ‘Reporting Requirement’ instead of ‘Record Keeping’ and has revised Section 6(a)(iv) of the permit.

28. Page 6, Unit 03/Specific Reporting Requirements 6c(i-v) - KU requests KDAQ to cite the specific part of the 401 KAR 61:015 which requires the specific reporting parameters noted in 6c(i-v).

Division’s response: The Division acknowledges the comment and has revised the language under Specific Reporting Requirements to read:

“For exceedances that occur as a result of startup, the permittee shall report:

- (i) The type of start-up (cold, warm, or hot);*
- (ii) Whether or not the duration of the start-up exceeded the manufacturer’s recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.”*

This language is based on post draft permit discussions with the Kentucky utility exchange group and EON representatives.

29. Page 6, Unit 03/General Comment - The Clean Air Mercury Rule (CAMR) will become effective during the lifetime of this permit. CAMR has a requirement to install mercury monitors by January 1, 2009. It is known that KDAQ is working on revisions to the State Implementation Plan (SIP) to incorporate CAMR into the state regulations. How does KDAQ propose to address the requirements of CAMR/SIP revisions into this permit? Should an alternate operating scenario be added? Or, should this issue be addressed as a minor permit revision at the time of CAMR/SIP implementation?

Division’s response: The source may request a reopening of their permit to incorporate the applicable requirements of the Clean Air Mercury Rule (CAMR), in accordance with 401 KAR 52:020, Title V Permits and Section F (a)(3) of the permit, if necessary. The reopening and revision of this permit notwithstanding, the permittee is required to comply with all applicable requirements, including those of CAMR in accordance with the schedule promulgated therein. There have been no changes to the permit as a result of this comment.

30. Page 8, Unit 04/Description/3rd line – The description “and low nitrogen oxide (NOx) burner” needs an “s” added to burner (burners).

Division’s response: The Division has revised the permit as requested by the source.

31. Page 8, Unit 04/Description/6th line – Delete “the ESP was installed in 1975 and the Low NOx burner was installed in 1995.” The ESP and Low NOx burners are noted in the description. Unlike the construction/operational dates of the boiler, the installation dates of the ESP and Low NOx burners are not needed to denote the date a regulation is or is not applicable.

Division’s response: The installation dates of the Low NOx burners and the ESP were not removed from the emission unit description because 401 KAR 61:015, Section 4(4) has

applicable requirements for indirect heat exchangers when its control device has been replaced. Therefore the installation date of the ESP is necessary to determine applicability of 401 KAR 61:015, Section 4(4). The installation date of the Low NOx burners is for informational purposes.

32. Page 8, Unit 04/Applicable Regulations – Cite the regulation as “40 CFR **Part 64**”.

Division’s response: The Division has revised the permit as requested by the source.

33. Page 8, Unit 04/ Emission Limitations 2b – KU requests the removal of “with respect to particulate matter”. Particulate matter is based on a three hour average, and is addressed in 2a. Opacity is based on a 6-minute average and is addressed in 2b. The verbiage “shall not exceed 20 percent opacity based on a six minute average” does not need to be repeat in 2bii, it is already stated in 2b. In addition, KU requests that the verbiage “good engineering practices” be added to b (ii). The operational requirements are not limited to the boiler. KU must also consider the operating conditions of the pollution control equipment (low NOx burners, ESP). The suggested language for 2bii follows:
“Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer **or determined by good engineering practices** and the time does not exceed the manufacturer’s recommendations **or good engineering practices.**”

Division’s response: See response to comment 17.

34. Page 9, Unit 04/Testing Requirements 3a – KU requests that verbiage be added, in the interim, if KU is unable to establish during the testing period. The suggested language follows:

“...to the Permittee shall **attempt** to establish the correlation between opacity and particulate matter emissions by stack testing. ***If a correlation can not be established, the permitted opacity limitations shall become the trigger level until the correlation is established. The permittee will attempt to establish a correlation with the next 6-month period.*** This testing shall be conducted...”

Division’s response: See response to comment 11. There have been no changes made to the permit based on this comment.

35. Page 10, Unit 04/Specific Monitoring Requirements 4(b)(i) – Suggest “if any 3-hour average opacity value” instead of “if any six-minute average opacity (average over a period of three hours) value”. The PM emission limit is 0.14 lb/mmBtu based on a 3-hour average, not “each 6 minute average” (if any six-minute average).

Division's response: See response to comment 19.

36. Page 10, Unit 04/Specific Monitoring Requirements 4(b)(ii) - Suggest “data averaged over a 3-hour period” instead of “data averaged over six-minute periods”. The PM emission limit is 0.29 lb/mmBtu based on a 3-hour average not “6 minute periods”. KU is also requesting that the verbiage “shall perform a stack test in the following calendar quarter...before conducting the test” be changed to “shall submit in the following calendar quarter a compliance test protocol as required by Section G(a) 17 of this permit. Testing shall be conducted as per the submitted protocol to demonstrate compliance with the particulate standard while operating at representative conditions”.

401 KAR 50:045, Section 2, requires a source to submit a test protocol 60 days prior to the scheduled test date. If KU is required to complete the testing in the next calendar quarter, KU must, as an example for a first quarter exceedence, submit the test protocol by April 30 and complete the test on June 29 or 30. This does not allow much flexibility. This only gives KU 30 days to review the quarterly data, prepare the test protocol, submit the protocol, and two (2) days at the end of the quarter to complete the testing. If the state has any issues with the test protocol such that a re-submittal is necessary, the testing may not be able to be completed in the “following” quarter.

Division's response: See the Divisions response to comment #20.

37. Page 10, Unit 04/Specific Monitoring Requirements 4(c) – Suggest the addition of following sentence at the end of the paragraph. “Pursuant to 40 CFR 64.3(d) the CEM shall be used to satisfy CAM requirement”.

Division's response: See the Divisions response to comment #21. There have been no changes made to the permit based on this comment.

38. Page 11, Unit 04/Specific Monitoring Requirements 4(g) – KU questions the requirement to monitor the time between ignition and the time steady state operation is achieved. The cite regulations, 401 KAR 61:005 and 401 KAR 61:015, do not contain a requirement to monitor the time between ignition and the time of achieving steady state operation. 401 KAR 50:055 requires notification of start-up (and shutdown and malfunction) events if the emissions are or may be in excess of the standard. It does not require the monitoring/recordkeeping/reporting of every start-up (i.e. “the time between ignition and the time of steady state operation”). KU does not currently have equipment which can record this type of data at the Green River Station and estimates that it would take six (6) months to install and program the hardware and software for this task. If it is found that this monitoring is required by regulation, KU requests permit language to allow an effective date of six (6) months after the permit is issued, so that equipment can be installed at Green River Station to monitor the data.

Division's response: See response to comment 22.

39. Page 11, Unit 04/Specific Record Keeping Requirements 5(c) - KU requests that this

recordkeeping requirement be deleted from the permit. KU has submitted the opacity indicator levels as the CAM plan for this unit. This language appears to be establishing another CAM requirement that was not specified in the Green River CAM plan.

Division's response: See response to comment 23. There have been no changes made to the permit based on this comment.

40. Page 11, Unit 04/Specific Record Keeping Requirements 5(d) - KU requests the addition of "or electronic format" after "in a designated logbook". This information is stored electronically.

Division's response: The Division has revised the permit as requested by the source.

41. Page 11, Unit 04/Specific Record Keeping Requirements 5(e) – KU questions the requirement to record the time of ignition; the time steady state operation is achieved, and calculate and record the elapsed time between the two.. Similar to comment #22, 401 KAR 61:005 and 401 KAR 61:015 do not contain a requirement to record this data. 401 KAR 50:055 requires notification of start-up (and shutdown and malfunction) events if the emissions are or may be in excess of the standard. It does not require the monitoring/recordkeeping/reporting of every start-up. KU does not currently have equipment which can record this type of data at Green River Station and estimates that it would take six (6) months to install and program the hardware and software for this task. If it is found that this recordkeeping is required by regulation, KU requests permit language to allow an effective date of six (6) months after the permit is issued, so that equipment can be installed at Green River Station to record the data.

Division's response: See response to comment 22.

42. Page 12, Unit 04/Specific Record Keeping Requirements 6(a)(i) - KU suggests, for clarify, changing the second sentence to "The averaging period used for data reporting should correspond to the emission standard averaging period which is a twenty-four (24) hour averaging period **for sulfur dioxide**." Twenty-four hour averaging applies to sulfur dioxide not opacity.

*Division's response: The Division believe the commenter meant '**Reporting Requirement**' instead of '**Record Keeping**' and has revised Section 6(a)(i) of the permit.*

43. Page 12, Unit 04/Specific Record Keeping Requirements 6(a)(iv) - KU requests the addition of "(passed calibrations)" after "proof of continuous monitoring system performance" to clearly identify that passed calibrations equal the proof that is required by (6)(iv).

*Division's response: The Division believe the commenter meant '**Reporting Requirement**' instead of '**Record Keeping**' and has revised Section 6(a)(iv) of the permit.*

44. Page 12, Unit 04/Specific Reporting Requirements 6(c)(i-v) - KU requests KDAQ to cite the specific part of the 40 KAR 61:015 which required the specific part of the 401 KAR 61:015 which requires the specific reporting parameters noted in 6c(i-v).

Division's response: See response to comment 28.

45. Page 13, Unit 04/General Comment - The Clean Air Mercury Rule (CAMR) will become effective during the lifetime of this permit. CAMR has a requirement to install mercury monitors by January 1, 2009. It is known that KDAQ is working on revisions to the State Implementation Plan (SIP) to incorporate CAMR into the state regulations. How does KDAQ propose to address the requirements of CAMR/SIP revisions into this permit? Should an alternate operating scenario be added? OR, should this issue be addressed as a minor permit revision at the time of CAMR/SIP implementation?

Division's response: See response to comment 29. There have been no changes to the permit as a result of this comment.

46. Page 14, Unit 05/Description– For clarification purposes KU is requesting that “each” be added after “maximum operating rate: 400 ton/hr”. This unit includes truck unloading operations, a coal receiving hopper, three coal conveyor belts, and transfer points, a coal crusher, coal stockpile operations, and haul roads.

Division's response: The Division has revised the permit as requested by the source.

47. Page 15, Unit 05/Specific Record Keeping Requirements – For clarification purposes KU is requesting that “**tonnages**” be added.

Division's response: The Division has revised the permit as requested by the source.

48. Page 16, KU requests that the insignificant activities list be amended to reflect the changes that were submitted in April of 2006 as per the attached DEP7007DD form.

Division's response: The Division has revised the permit as requested by the source.

49. Section J/Acid Rain Permit- Boilers 1, 2, & 3, even though they are retired, received SO₂ allocations.

Division's response: The Division concurs with the comment and has revised the permit as requested by the source.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.